Title: Kids 'R Kings Katering

Brief Overview:

The purpose of this unit is to help students use fractions and decimals in the real life context of a catering service. Students will select menus and purchase food, plan space and serving responsibilities, and prepare recipes. As a final assessment, students will develop a party plan based on the specific needs of a client.

NCTM 2000 Principles for School Mathematics:

- **Equity:** *Excellence in mathematics education requires equity - high expectations and strong support for all students.*
- **Curriculum:** *A curriculum is more than a collection of activities: it must be coherent, focused on important mathematics, and well articulated across the grades.*
- **Teaching:** *Effective mathematics teaching requires understanding what students know and need to learn and then challenging and supporting them to learn it well.*
- **Learning:** *Students must learn mathematics with understanding, actively building new knowledge from experience and prior knowledge.*
- **Assessment:** *Assessment should support the learning of important mathematics and furnish useful information to both teachers and students.*
- **Technology:** *Technology is essential in teaching and learning mathematics; it influences the mathematics that is taught and enhances students' learning.*

Links to NCTM 2000 Standards:

- **Content Standards**

<u>Number and Operations</u>

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems
- Understand meanings of operations and how they relate to one another
- Compute fluently and make reasonable estimates
- Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals
- Develop understanding of fractions as parts of unit wholes, as parts of a collection, as locations on number lines, and as divisions of whole numbers
- Use models, benchmarks, and equivalent forms to judge the size of fractions
- Recognize and generate equivalent forms of commonly used fractions, decimals, and percents

Geometry

- Specify locations and describe spatial relationships using coordinate geometry and other representational systems
- Use visualization, spatial reasoning, and geometric modeling to solve problems
- Use geometric models to solve problems in other areas of mathematics, such as number and measurement;
- Recognize geometric ideas and relationships and apply them to other disciplines and to problems that arise in the classroom or in everyday life

Measurement

- Understand measurable attributes of objects and the units, systems and processes of measurement
- Apply appropriate techniques, tools and formulas to describe measurements

Data Analysis and Probability

- Represent data using tables and graphs such as line plots, bar graphs, and line graphs

- **Process Standards**

Problem Solving

- Building new mathematical knowledge through problem solving
- Apply and adapt a variety of appropriate strategies to solve problems
- Monitor and reflect on the process of mathematical problem solving

Reasoning and Proof

- Recognize reasoning and proof as fundamental aspects of mathematics
- Select and use various types of reasoning and methods of proof

Communication

- Organize and consolidate their mathematical thinking through communication
- Communicate their mathematical thinking coherently and clearly to peers, teachers and others
- Use the language of mathematics to express mathematical ideas precisely

Connections

- Recognize and use connections among mathematical ideas
- Understand how mathematical ideas interconnect and build on one another to produce a coherent whole
- Recognize and apply mathematics in contexts outside of mathematics

Representation

- Create and use representations to organize, record and communicate mathematical ideas
- Select, apply and translate among mathematical representations to solve problems
- Use representations to model and interpret physical, social and mathematical phenomena

Grade/Level:

4th – 5th grade

Duration/Length:

4 –5 days (the last 2 days for performance-based assessment project)

Prerequisite Knowledge:

- Students must have a basic understanding of fractions as a representation of parts of a whole.
- Students must know how to add fractions with like denominators.
- Students must have basic concept of equivalent fractions.
- Students must be familiar with different math tools used to solve problems with fractions.
- Students must be able to use geometric models to solve problems in other areas of mathematics.
- Students must be able to recognize geometric ideas and relationships.
- Students should be familiar with reducing fractions to simplest terms.
- Students should be familiar with customary units for measuring volume.

Student Outcomes:

- Students will be able to add and subtract fractions.
- Students will be able to determine equivalent fractions.
- Students will be able to use geometry to plan space and determine serving needs.
- Students will be able to add and subtract decimals.

Materials/Resources/Printed Materials:

- student and teacher resource pages
- models of fractions (for example: fraction circles and fraction squares)

Development/Procedures:

Introduction: Teacher should use the pre-assessment task (Student Resource Pre-Assess) to pre-assess the students. The assignment may be given as homework and reviewed on the first day of the unit before beginning the units' activities.

Day 1: Students will create and use pieces to represent given fractional dimensions, to plan space for a fun and games day. A backyard area must be divided into six different areas for events, with each event requiring a different amount of space. Students are given a 12 x 12 grid that can be cut into fractional bars, with the bars then being arranged on a space planner according to specific guidelines. Teacher should explain the activity, noting the difference between the space planning worksheet and the space planner. Students should be reminded to label the pieces as they are cut.

Materials: Student Resource Sheets # 1A-1, 1A-2, 1A-3

Day 2: Teacher will work with students to create menus for a party from a given a price list for items and a specific budget. Students must make choices that will create two interesting, but unique menus. The teacher will work with the students to first complete the menu planning worksheet, which is used to determine total quantities and prices based on servings per unit. The class should work together to complete the entrée section of the worksheet, and the students should work individually to complete the remaining four sections. Finally, the students will work in cooperative groups to create Menu #1, which will be written on chart paper, and presented to the class.
Materials: Student Resource Sheets # 2B-1, 2B-2, 2B-3 and Teacher Resource Sheet # 2B-4
Homework: Students will create a second menu that keeps to the budget guidelines.

Day 3: Teacher will work with the students to double and triple an oatmeal cookie recipe. Teacher may decide to warm up with reviewing how to add fractions, depending on the results of the pre-assessment. Students will work on doubling the recipe in class with the teacher. The teacher should model how to use addition to double the recipe and model how to show their work on the worksheet. Optionally, the teacher may ask a student to model how they would complete the task. Students should be able to describe the steps they took to solve both verbally and in written form.
Materials: Student Resource Sheets # 3C-1, 3C-3 and Teacher Resource Sheets # 3C-2 and 3C-4 (answer keys)
Homework: Students will triple the oatmeal recipe.

Days 4 – 5: Students will work on the Performance-Based Assessment Task (Student Resource Sheets Assess # 1 - 3) as a final assessment for the unit. Students may complete the computational parts of the assessment on the first day and will need the second day to complete the written portion of the assessment.

Performance Assessment:

Informal Assessment:

- Observing students during classroom activities
- Using a math journal to record responses and describe how they arrived at answers (see lesson plans)

Formal Assessment

- To culminate the unit, students will develop a party plan based on the specific needs of a client. The assessment may take 2 days to complete and ends with the students writing a letter and contract to a client describing their developed party plan.

In addition, the teacher may decide to use standardized fraction worksheets to supplement and/or reinforce daily lessons.

Authors:

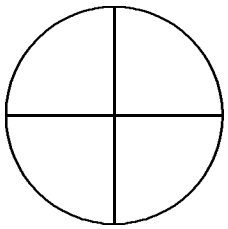
Name:	Mary Benton
School:	Diamond Elementary School
County/Jurisdiction:	Montgomery County, MD

Name:	Renee Patrick
School:	Forest Knolls Elementary School
County/Jurisdiction:	Montgomery County, MD

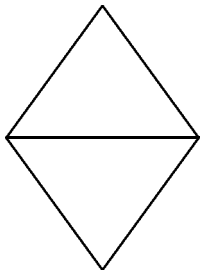
Kid's 'R Kings Katering

A Performance-Based Assessment Task on Fractions and Decimals

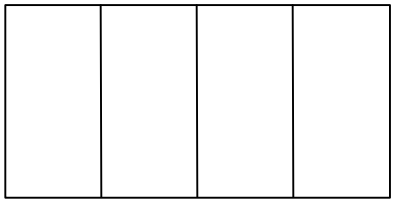
Shade in the shape to show the fractional amount.



1. ¼



2. ½



3. ¾

Solve.

4. Richard ate 1/2 of the apple pie. His sister ate 1/8 of the pie and Richard's father ate 2/8 of the pie. How much of the pie was left over?
   _____

5. Four students from Mr. Smith's class went to get pizza for lunch. They ordered a pizza with 12 slices. If they shared the pizza equally, what fraction of the pizza would each student get? _____

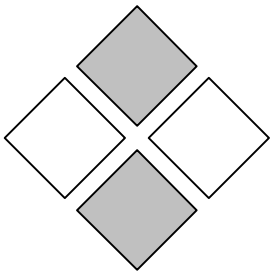
Compare the fractions. [>, <, =]

6. 1/2 ☐ 1/4

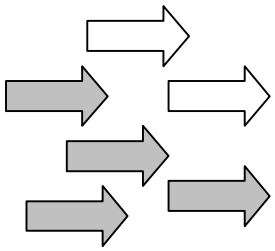
7. ☐ 2/6

8. 9/12 ☐ 4/10

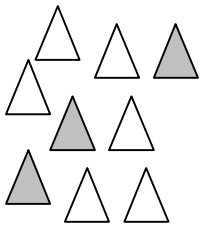
Write the fraction for the shaded part.



9. _____



10. _____



11. _____

Fun and Games Day

Mr. Rogers is planning a fun and games day for his co-workers and their families. He has asked for your help in planning the space he will need in his back yard in order to have space for all the events he has planned. He has planned the following events. Each is followed by the amount of space that it requires in the yard.

Horseshoes – 4 x 3	Fraction of total space equals _____/144	Simplified _____
Volleyball – 4 x 6	Fraction of total space equals _____/144	Simplified _____
Races – 12 x 2	Fraction of total space equals _____/144	Simplified _____
Tug-of-War – 3 x 7	Fraction of total space equals _____/144	Simplified _____
Crafts – 2 x 2	Fraction of total space equals _____/144	Simplified _____
Face Painting – 1 x 1	Fraction of total space equals _____/144	Simplified _____

Please note that each event area needs a space of 1 x 1 surrounding it in order to prevent events from overlapping, and to provide an area for walking. Also, because of the possibility of injury, volleyball and horseshoes cannot be placed in adjoining spaces. They cannot be next to each other on any side.

The 12 x 12 grid on the following page is your space planner. Use the planning worksheet guide to cut bars representing each of the areas named above, based on the guidelines given.

Once you have designed your space according to the guidelines, determine what fraction of the space is taken up by each event. Simplify whenever possible. For example, a space that is 10 x 2 would be 20/144 or 5/36 (simplified).

Rubric

2	All directions and guidelines followed; all dimensions correct; all areas labeled; neat
1	Not all directions and guidelines followed; errors in dimensions; areas not labeled; could have been neater
0	Many elements missing, incorrect or not done

Planning Worksheet

Use this sheet to cut fractional bars that will be used to plan your spacing for events on the next sheet. Label the sections as you cut.

Fun and Games – Space Planner

NOTE: Be sure to identify each space you have placed on the planner, i.e., Horseshoe area, 4/12 x 3/12 as you glue them to his planner.

Planning a Menu

Mrs. Ruckus is giving a neighborhood "End of School" party. There are a total of 48 children attending. She has collected $200.00 to spend for food. Using this amount and the guidelines below, plan 2 different menus that you might offer Mrs. Ruckus for her party.

Guidelines:

1. Each person attending eats a meal at the party.
2. Each person receives one entrée, one side dish, one snack, two drinks, and one dessert.
3. You may choose more than one side or snack to serve, or more than one kind of drink.
4. If the entrée is pizza, each person receives two slices.
5. Each of the two menus must have a different combination of foods. You may have some of the same elements, but you may not simply change the entrée without changing any other elements.
6. You must stay within your budget.

Use the worksheet on the next page to determine the two menus you will present to Mrs. Ruckus for her party. When you have completed the worksheets for each menu, fill in the final menu formats below.

Menu #1

1. Entrée: _____ Cost: _____
2. Side(s): _____ Cost: _____
   _____ _____
   _____ _____
   _____ _____
3. Snack(s):_____ Cost: _____
   _____ _____
   _____ _____
4. Drink(s):_____ Cost: _____
   _____ _____
5. Dessert: _____ Cost: _____

TOTAL COST FOR PARTY:$_____

Menu #2

1. Entree : _____ Cost: _____
2. Side(s): _____ Cost: _____
   _____ _____
   _____ _____
   _____ _____
3. Snack(s):_____ Cost: _____
   _____ _____
   _____ _____
4. Drink(s):_____ Cost: _____
   _____ _____
5. Dessert: _____ Cost: _____

TOTAL COST FOR PARTY: $_____

Famous Foods – Pricing to Meet a Caterer's Needs

Entrees

Type	Unit Size	Price per Unit
Hamburgers, ¼ lb	Box, 12 patties	$ 18.00
Hotdogs, All Beef	Box, 30 hotdogs	$ 12.95
Pizza	Large, 12 slices	$ 9.75
Fried Chicken	4 lb Bag, 24 pieces	$ 22.00

Side Dishes

Type	Unit Size	Price per Unit
Potato Salad	1 Quart, 8 servings	$ 3.85
Cole Slaw	1 Quart, 8 servings	$ 3.65
Baked Beans	1 Quart, 8 servings	$ 2.95
Fresh Vegetable Tray with Dip	Tray, 12 servings	$ 8.95

Snacks

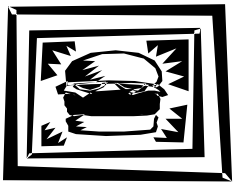
Type	Unit Size	Price per Unit
Potato Chips	2 lb. Bag, 10 servings	$ 4.65
Pretzels	2 lb. Bag, 10 servings	$ 3.95
Popcorn, buttered	2 lb. Bag, 10 servings	$ 4.25
Taco chips	2 lb. Bag, 10 servings	$ 5.25

Drinks

Type	Unit Size	Price per Unit
Soda, cans	Case, 24 cans	$ 7.95
Soda, bottles	2 Liter Bottle, 8 servings	$ 1.25
Lemonade	Gallon, 12 servings	$ 1.20
Fruit Punch	Gallon, 12 servings	$ 1.20

Desserts

Type	Unit Size	Price per Unit
Giant Cookies – CC, Sugar, PB	Box, 12 cookies	$ 12.60
Sheet Cake – Chocolate or Vanilla	1 Cake, 30 servings	$ 32.00
Ice Cream – Choc/Van/Straw Mix	1 Gallon, 18 scoops	$ 6.95
Decorated Cupcakes–Choc or Van	Box, 1 dozen	$ 8.95



Student Resource Sheet # 2B-3

Menu Planning Worksheet

Number of Servings Needed: _____ Budget: _____

Entrée	Servings/Unit	Price/Unit	Units Needed	Total Price

Sides	Servings/Unit	Price/Unit	Units Needed	Total Price

Snacks	Servings/Unit	Price/Unit	Units Needed	Total Price

Drinks	Servings/Unit	Price/Unit	Units Needed	Total Price

Dessert	Servings/Unit	Price/Unit	Units Needed	Total Price

Menu Planning Worksheet

of Servings Needed: 48 people

Budget: $200.00

Entrée	Servings/Unit	Price/Unit	Units Needed	Total Price
Hamburger	12 /box	$ 18.00	4	$ 72.00
Hot dogs	30 /box	$ 12.95	2	$ 25.90
Pizza	12 slices/pizza	$ 8.75	8	$ 70.00
Chicken	24/bag	$ 22.00	2	$ 44.00

Sides	Servings/Unit	Price/Unit	Units Needed	Total Price
Potato salad	8/quart	$ 3.85	6	$ 23.10
Cole slaw	8/quart	$ 3.65	6	$ 21.90
Baked beans	8/quart	$ 2.95	6	$ 17.70
Fresh veggies/dip	12/tray	$ 8.95	4	$ 35.00

Snacks	Servings/Unit	Price/Unit	Units Needed	Total Price
Chips	10/bag	$ 4.65	5	$ 23.25
Pretzels	10/bag	$ 3.95	5	$ 19.75
Popcorn	10/bag	$ 4.25	5	$ 21.25
Taco chips	10/bag	$ 5.25	5	$ 26.25

Drinks	Servings/Unit	Price/Unit	Units Needed	Total Price
Soda/cans	24/case	$ 7.95	4	$ 31.80
Soda/bottles	8/bottle	$ 1.25	12	$ 15.00
Lemonade	12/gallon	$ 1.20	8	$ 9.60
Fruit punch	12/gallon	$ 1.20	8	$ 9.60

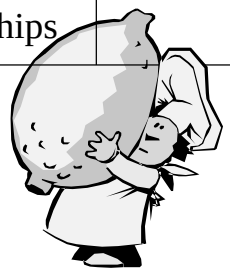
Dessert	Servings/Unit	Price/Unit	Units Needed	Total Price
Cookies	12/box	$ 12.60	4	$ 50.40
Cake	30 servings/cake	$ 32.00	2	$ 64.00
Ice cream	18 scoops/gallon	$ 6.95	3	$ 20.85
Cupcakes	12/box	$ 8.95	4	$ 35.80

Student Resource Sheet # 3C-1

Name: _____

Read the Oatmeal Cookie Recipe below and double it. Show your work in the space provided. Reduce all fractions to the simplest form.

ORIGINAL OATMEAL COOKIE RECIPE	**YOUR WORK**	**DOUBLED RECIPE**
½ cup margarine, softened		
½ cup vegetable shortening		
¾ cup brown sugar		
¾ cup sugar		
2 eggs		
1 tsp vanilla		
½ tsp cinnamon		
¼ tsp nutmeg		
1 tsp baking soda		
2 ¼ cup flour		
2 cups semi-sweet chocolate chips		



Read the Oatmeal Cookie Recipe and double it. Show your work in the space provided. Reduce all fractions to the simplest form.

ORIGINAL OATMEAL COOKIE RECIPE	**YOUR WORK**	**DOUBLED RECIPE**
½ cup margarine, softened	½ + ½ = 1	1 cup margarine, softened
½ cup vegetable shortening	½ + ½ = 1	1 cup vegetable shortening
¾ cup brown sugar	¾ + ¾ = 1 ½	½ cup brown sugar
¾ cup sugar	¾ + ¾ = 1 ½	½ cup sugar
2 eggs	2 + 2 = 4	4 eggs
1 tsp vanilla	1 + 1 = 2	2 tsps vanilla
½ tsp cinnamon	½ + ½ = 1	1 tsp cinnamon
¼ tsp nutmeg	¼ + ¼ = ½	½ tsp nutmeg
1 tsp baking soda	1 + 1 = 2	2 tsps baking soda
1 ½ cups flour	1 ½ + 1 ½ = 3	3 cups flour
2 cups semi-sweet chocolate chips	2 + 2 = 4	4 cups semi-sweet chocolate chips

Student Resource Sheet # 3C-3

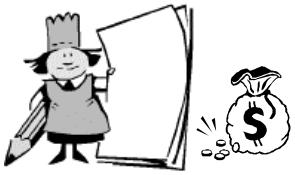
Name: _____

Read the Oatmeal Cookie Recipe below and triple it. Show your work in the space provided. Reduce all fractions to the simplest form.

ORIGINAL OATMEAL COOKIE RECIPE	**YOUR WORK**	**TRIPLED RECIPE**
½ cup margarine, softened		
½ cup vegetable shortening		
¾ cup brown sugar		
¾ cup sugar		
2 eggs		
1 tsp vanilla		
½ tsp cinnamon		
¼ tsp nutmeg		
1 tsp baking soda		
2 ¼ cup flour		
2 cups semi-sweet chocolate chips		

Read the Oatmeal Cookie Recipe and triple it. Show your work in the space provided. Reduce all fractions to the simplest form.

ORIGINAL OATMEAL COOKIE RECIPE	YOUR WORK	TRIPLED RECIPE
½ cup margarine, softened	½ + ½ + ½ = 1 ½	1 ½ cups margarine, softened
½ cup vegetable shortening	½ + ½ + ½ = 1 ½	1 ½ cups vegetable shortening
¾ cup brown sugar	¾ + ¾ + ¾ = 2 ¼	2 ¼ cups brown sugar
¾ cup sugar	¾ + ¾ + ¾ = 2 ¼	2 ¼ cups sugar
2 eggs	2 + 2 + 2 = 6	6 eggs
1 tsp vanilla	1 + 1 + 1 = 3	3 tsp vanilla
½ tsp cinnamon	½ + ½ + ½ = 1 ½	1 ½ tsp cinnamon
¼ tsp nutmeg	¼ + ¼ + ¼ = ¾	¾ tsp nutmeg
1 tsp baking soda	1 + 1 + 1 = 3	3 tsp baking soda
1 ½ cups flour	1 ½ + 1 ½ + 1 ½ = 4 ½	4 ½ cups flour
2 cups semi-sweet chocolate chips	2 + 2 + 2 = 6	6 cups semi-sweet chocolate chips



The Moneybags' Party

Mr. and Mrs. Moneybags are planning a giant birthday celebration for the 8th birthday of their twins, Penny and Richie. The Moneybags have asked your catering service to take care of all the details of the party, which will be held in the back yard at their home. The Moneybags have completed the following survey to let you know what kind of party they would like.

DATE OF EVENT: August 5th TIME OF EVENT: 1 PM TO 3 PM

1. How many children will attend? 30 Average age of guests? 8 years

2. Which theme would you prefer for your party?
   - _____ Magic
   - __X__ Beach Party
   - _____ The Circus
   - _____ Sports Day

3. Which forms of Entertainment would you prefer?

_____ Magician	$20.00/hour	_____
_____ Clown/Balloon animals	$26.00/hour	_____
_____ Moon Bounce	$45.00/hour	_____
_____ Pony Rides	$60.00/hour	_____
__X__ T-shirt Making	$ 5.00/guest	_____
__X__ Limbo/Hula Hoops/Dance Contests (prizes)	$18.00	_____
__X__ Sand Sculptures	$30.00	_____
_____ Sports Events	$25.00	_____
__X__ Sprinkler/Waterslide	$20.00	_____

4. Paper products you would like us to provide (party-themed).

__X__ Cups, plates	$15.00	_____
_____ Napkins	$ 5.00	_____
_____ Plastic forks, spoons	$ 6.95	_____
__X__ Party bags	$ 3.00/guest	_____
_____ Tablecloths	$ 2.95 each	_____
__X__ Table decorations	$13.00	_____

5. Decorations you would like us to provide.

__X__ Balloons, helium	$ 9.95/dozen	3 dozen (#) _____
_____ Streamers	$ 3.00/roll	_____
_____ Canopy	$75.00	_____
_____ Strings of lights	$ 4.95 per 10 ft. string	_____

6. Food you would like us to serve.

_____	Hotdogs on buns	$ .75 each	_____
_____	Hamburgers on buns	$1.00 each	_____
X	Pizza (2 slices/guest)	$ .50 / slice	60 slices
X	Chips/pretzels/popcorn	$2.95 / 2lb bag	2 pretzels, 2 chips
X	Ice Cream	$6.95/gal (18 scoops)	2 gallons
X	Cookies	$ .25 each	60 cookies

(For ice cream sandwiches, allow 2 cookies and 1 scoop of ice cream per child)

_____	Cake	$23.00 (feeds 30)	_____
X	Lemonade	$1.20/gal (serves 10)	3 gallons
X	Fruit Punch	$1.20/gal (serves 10)	3 gallons

7. 10 servers will be attending, at the rate of $8.00/hour each. _____

TOTAL COST OF PARTY: _____

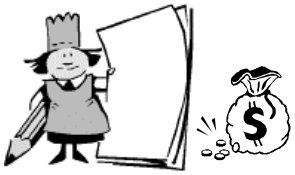
8. Please tell us your budget for this party? $ 500.00

Based on the items checked, calculate the cost of the party in the spaces to the right. Compare the total cost you calculated with the budget given by the Moneybags. Can Kids 'R Kings Katering stay within the budget guidelines for this party? _____ Explain, showing your work here.

What changes could be made to the plans to lower the costs?

Rubric

2	Student has determined that the party is over budget and shows calculation; provides an excellent plan for reducing costs
1	Student has determined that the party is over budget; provides a somewhat reasonable plan to reduce costs
0	Calculations incomplete or incorrect; explanation is inconsistent with figures or no explanation is given



The Moneybags' Party

Mr. and Mrs. Moneybags are planning a giant birthday celebration for the 8th birthday of their twins, Penny and Richie. The Moneybags have asked your catering service to take care of all the details of the party, which will be held in the back yard at their home. The Moneybags have completed the following survey to let you know what kind of party they would like.

DATE OF EVENT: August 5th TIME OF EVENT: 1 PM TO 3 PM

1. How many children will attend? 30 Average age of guests? 8 years

2. Which theme would you prefer for your party?

_____ Magic	__X__ Beach Party
_____ The Circus	_____ Sports Day

3. Which forms of Entertainment would you prefer?

_____ Magician	$20.00/hour	_____
_____ Clown/Balloon animals	$26.00/hour	_____
_____ Moon Bounce	$45.00/hour	_____
_____ Pony Rides	$60.00/hour	_____
__X__ T-shirt Making	$ 5.00/guest	$150.00
__X__ Limbo/Hula Hoops/Dance Contests (prizes)	$18.00	$ 18.00
__X__ Sand Sculptures	$30.00	$ 30.00
_____ Sports Events	$25.00	_____
__X__ Sprinkler/Waterslide	$20.00	$ 20.00

4. Paper products you would like us to provide (party-themed).

__X__ Cups, plates	$15.00	$ 15.00
_____ Napkins	$ 5.00	_____
_____ Plastic forks, spoons	$ 6.95	_____
__X__ Party bags	$ 3.00/guest	$ 90.00
_____ Tablecloths	$ 2.95 each	_____
__X__ Table decorations	$13.00	$ 13.00

5. Decorations you would like us to provide.

__X__ Balloons, helium	$ 9.95/dozen	3 dozen (#) $29.85
_____ Streamers	$ 3.00/roll	_____
_____ Canopy	$75.00	_____
_____ Strings of lights	$ 4.95 per 10 ft. string	_____

6. Food you would like us to serve.

_____	Hotdogs on buns	$ .75 each	_____
_____	Hamburgers on buns	$1.00 each	_____
X	Pizza (2 slices/guest)	$ .50 / slice	60 slices $30.00
X	Chips/pretzels/popcorn	$2.95 / 2lb bag	2 pretzels, 2 chips $11.80
X	Ice Cream	$6.95/gal (18 scoops)	2 gallons $13.90
X	Cookies	$ .25 each	60 cookies $15.00

(For ice cream sandwiches, allow 2 cookies and 1 scoop of ice cream per child)

_____	Cake	$23.00 (feeds 30)	_____
X	Lemonade	$1.20/gal (serves 10)	3 gallons $ 3.60
X	Fruit Punch	$1.20/gal (serves 10)	3 gallons $ 3.60

7. 10 servers will be attending, at the rate of $8.00/hour each. $80.00 x 2 = $160.00

TOTAL COST OF PARTY: $603.75

8. Please tell us your budget for this party? $ 500.00

Based on the items checked, calculate the cost of the party in the spaces to the right. Compare the total cost you calculated with the budget given by the Moneybags. Can Kids 'R Kings Katering stay within the budget guidelines for this party? No Explain, showing your work here.

$ 603.75
- 500.00
$ 103.75 over budget

What changes could be made to the plans to lower the costs? *Answers will vary.*

Rubric

2	Student has determined that the party is over budget and shows calculation; provides an excellent plan for reducing costs
1	Student has determined that the party is over budget; provides a somewhat reasonable plan to reduce costs
0	Calculations incomplete or incorrect; explanation is inconsistent with figures or no explanation is given

Backyard Bonanza

The Moneybags need help planning the space in their back yard to accommodate all the activities and food tables. Help them plan the space for all the events, as well as the food and dining tables according to the following:

T-Shirt Making 4 x 5	Fraction of total space equals _____/144	Simplified _____
Limbo/Hula Hoop Dance – 6 x 6	Fraction of total space equals _____/144	Simplified _____
Sand Sculptures – 5 x 5	Fraction of total space equals _____/144	Simplified _____
Sprinkler/Waterslide – 15 x 4	Fraction of total space equals _____/144	Simplified _____
Food Service Tables – 2 x 4	Fraction of total space equals _____/144	Simplified _____
Dining Tables – 2 x5	Fraction of total space equals _____/144	Simplified _____

Cut fraction bars from the worksheet attached and arrange them on the space planner according to the following guidelines:

1) The sand sculptures and sprinkler/waterslide cannot be placed in adjoining spaces with the food or dining tables.

2) All tables and areas must have at least 1 x 2 of space between them on all sides for walking.

3) Food service tables and dining tables must be in the same area.

Once you have created a plan that meets all the requirements, glue them to the space planner sheet and mark each area.

Rubric

2	All directions and guidelines followed; all dimensions correct; all areas labeled; neat
1	Not all directions and guidelines followed; errors in dimensions; areas not labeled; could have been neater
0	Many elements missing, incorrect or not done

Planning Worksheet

Use this planning worksheet to cut fractional bars to use as space planning tools. Arrange according to the guidelines given on the previous page. Once you have finalized your plan, glue the pieces to the Space Planning Sheet, being sure to mark the name of each area on the piece.

Space Planning Sheet – Moneybags' Beach Party

This space planning sheet explains how Kids 'R Kings Katering will arrange your backyard for your beach party on August 5, 2002. Please review this plan, and call us with any questions or concerns you may have.

Serving Sense

After all the fun events are completed, the tables will be set for pizza, snacks and dessert. The Kids 'R Kings Katering staff of 10 waiters and waitresses will set up and serve the food. There will be 30 children dining, with 10 children seated at each of the three tables. Create the fractions in answer to the following questions. If you are able to simplify your fraction, show it in both forms.

1) Two (2) servers are needed for each table. Write a fraction showing the fractional part of the total staff that would be needed to serve at the tables.

_____

2) Since most of the food is already prepared, only one member of the staff is needed to prepare the food. Write a fraction showing the fractional part of the total staff that will be preparing food.

_____

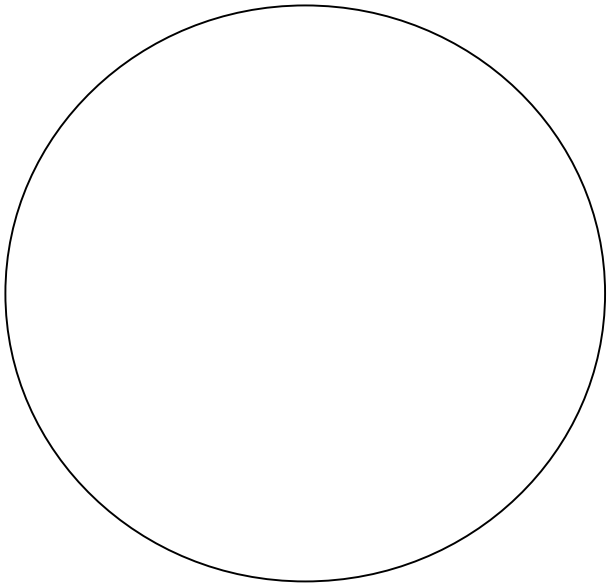
3) The remaining members of the staff are responsible for clean up after the party. Write a fraction to show the fractional part of the total staff that is assigned to cleanup duty.

_____

4) Write a fraction comparing the total number of staff members to the total number of party guests.

_____

5) Now, create and label a circle graph showing what fraction of the staff was assigned to each duty.



Student Resource Sheet – Assess 3

Name: _____

1. As the chef of the company, you have to make ice cream cookie sandwiches for the party. You will need 2 cookies and 1 scoop of ice cream for each sandwich. Each recipe makes 40 cookies. Determine the number of cookie recipes you must make. _____

2. Will there be cookies left over? _____ If so, how many? _____

3. Write the new cookie recipe here.

Original Chocolate Chip Cookie Recipe	**New Recipe**
1 cup margarine, softened	
¾ cup brown sugar	
¾ cup sugar	
2 eggs	
1 tsp vanilla	
1 tsp salt	
1 tsp baking soda	
2 ¼ cup flour	
2 cups semi-sweet chocolate chips	

One gallon of ice cream = 18 scoops

5. How many scoops of ice cream will you need? _____

6. How many gallons of ice cream will you need? _____

7. Will there be any ice cream scoops left over? _____
   If so, how many? _____

Teacher Resource Sheet – Assess 3

Name: _____

1. As the chef of the company, you have to make ice cream cookie sandwiches for the Moneybags' party. You will need 2 cookies and 1 scoop of ice cream for each sandwich. Each recipe makes 40 cookies. How many cookie recipes you must make. 2

2. Will there be cookies left over? Yes If so, how many? 20

3. Write the new cookie recipe here.

Original Chocolate Chip Cookie Recipe	New Recipe
1 cup margarine, softened	2 cups margarine, softened
¾ cup brown sugar	1 ½ cups brown sugar
¾ cup sugar	1 ½ cups sugar
2 eggs	4 eggs
1 tsp vanilla	2 tsps. vanilla
1 tsp salt	2 tsps. salt
1 tsp baking soda	2 tsps. baking soda
2 ¼ cup flour	4 ½ cups flour
2 cups semi-sweet chocolate chips	4 cups semi-sweet chocolate chips

One gallon of ice cream = 18 scoops

5. How many scoops of ice cream will you need? 30 scoops

6. How many gallons of ice cream will you need? 2 gallons

7. Will there be any ice cream scoops left over? yes
   If so, how many? 6 scoops

After the Party

The Moneybags' birthday 'Beach Party' is over, and it appeared to be a huge success. Pretend that you are Mr. or Mrs. Moneybags, and you are writing to thank Kids 'R Kings Katering for creating a wonderful event. Using the letter format on the next page, write a formal thank you letter to the company. Be sure to include the following ideas:

- Introduction
- Tell what you and the children enjoyed the most. Be specific. You may create details to make your letter more interesting.
- Tell whether or not you would give a recommendation to others about the company, and why.
- Closing
- Signature

Scoring Rubric

3	All elements of the letter included; interesting vocabulary and details; two or less spelling and grammar errors; very neat
2	Most elements of the letter included; some interesting details; several grammar and spelling errors; could have been neater
1	Very few elements of the letter included; many grammar and spelling errors; could have been neater
0	No letter

_____

Kids ‘R Kings Katering
987 Ambrose Lane
Partland, MD 11111
ATTN: Mrs. Quotient, Owner

_____;

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____